

WHAT IS CLAIMED:

1. A device for conditioning, cleaning, and/or keeping clean at least one of a rotating roll and ^{per sheet} a circulating belt of a paper machine, comprising:

at least two doctors arranged behind one another in a roll and/or belt travel direction and spaced at a distance from one another,

wherein said at least two doctors are assigned to the at least one of the rotating roll and the circulating belt.

2. The device in accordance with claim 1, wherein said at least two doctors are located before a take-on point at which at least one felt is guided onto the at least one of the roll and the belt.

3. The device in accordance with claim 2, further comprising a boundary layer doctor positioned adjacent said at least one felt before the take-on point, wherein a rear doctor of said at least two doctors, when viewed in the travel direction, is connected to said boundary layer doctor.

4. The device in accordance with claim 3, further comprising a low-pressure suction device arranged for suctioning a wedge-shaped opening formed at least by the at least one of the roll and the belt, said at least one felt, said rear doctor, and said boundary layer doctor.

5. The device in accordance with claim 3, wherein a distance between said boundary layer doctor and the take-on point is less than approximately 500 mm.

6. The device in accordance with claim 5, wherein said distance is less than about 400 mm.

7. The device in accordance with claim 5, wherein said distance is less than approximately 300 mm.

8. The device in accordance with claim 1, further comprising:
a press arranged before the at least one of the roll and the belt; and

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a low pressure suction device arranged for suctioning a space between said press and the at least one of the roll and the belt.

9. The device in accordance with claim 1, wherein the at least one of the roll and the belt comprises a suction felt guidance roll.

10. The device in accordance with claim 9, further comprising a first press of a pressing section of a paper machine,
wherein said suction felt guidance roll is provided subsequently to said first press.

11. The device in accordance with claim 10, wherein said first press comprises a roll press.

12. The device in accordance with claim 10, wherein said first press comprises an extended nip press.

13. The device in accordance with claim 10, further comprising a spray guard positioned between said suction felt guidance roll and said first press.

14. The device in accordance with claim 13, wherein said spray guard is arranged to extend substantially across a width of the machine.

15. The device in accordance with claim 1, further comprising at least one cleaning device acting on a surface of the at least one of the roll and the belt.

16. The device in accordance with claim 15, wherein said at least one cleaning device is positioned between said at least two doctors.

17. The device in accordance with claim 15, wherein said at least one cleaning device comprises at least one jet cleaning or spray device arranged to direct a pressurized medium at said surface.

18. The device in accordance with claim 17, wherein said pressurized medium comprises a fluid or air.

19. The device in accordance with claim 18, wherein said fluid comprises

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water.

20. The device in accordance with claim 15, wherein said at least one cleaning device comprises a combined blowing or spraying device and suction device.

21. The device in accordance with claim 15, wherein said at least one cleaning device comprises at least one rotatable spray head arranged to traverse crosswise to the travel direction and arranged to rotate around an axis.

22. The device in accordance with claim 15, wherein said at least one cleaning device emits a medium onto said surface under a pressure that is greater than approximately 20 bar.

23. The device in accordance with claim 22, wherein said medium is under pressure less than about 30 bar.

24. The device in accordance with claim 22, wherein said medium is under pressure less than about 25 bar.

25. The device in accordance with claim 15, wherein said at least one cleaning device comprises a spray head which is rotatable around an axis, said spray head including at least one nozzle which is inclined relative to said axis.

26. The device in accordance with claim 25, further comprising a vapor suctioning device,

wherein said spray head is assigned to said vapor suctioning device.

27. The device in accordance with claim 15, further comprising a housing which is open to the at least one of the roll and the belt,

wherein said at least one cleaning device is enclosed and/or surrounded by said housing.

28. The device in accordance with claim 27, wherein said housing is sealed off from said surface by said at least two doctors.

29. The device in accordance with claim 1, wherein the at least one of the

roll and the belt comprises a grooved and/or blind bored surface, and is arranged to form a pressing nip, and said device further comprises a unit for evening out an amount of water supplied to said pressing nip.

30. The device in accordance with claim 29, wherein said evening out unit comprises one of said at least two doctors.

31. The device in accordance with claim 30, wherein in the one doctor is the first of the at least two doctors in the travel direction.

32. The device in accordance with claim 29, wherein said evening out unit comprises a blowing device for blowing out grooves and/or blind bores in said surface with a pressurized medium.

33. The device in accordance with claim 32, wherein said pressurized medium is pressurized air.

34. The device in accordance with claim 29, wherein said evening out unit includes a suction device for suctioning water out of said surface.

35. The device in accordance with claim 29, wherein said evening out unit includes a combined blowing and suction device.

36. The device in accordance with claim 29, wherein said evening out unit includes a device for applying a hydrodynamically produced underpressure to said surface.

37. The device in accordance with claim 36, wherein said device for applying hydrodynamically produced underpressure includes at least one of said at least two doctors.

38. The device in accordance with claim 37, wherein said at least one doctor comprises a foil doctor arranged diagonally.

39. The device in accordance with claim 1, wherein the at least one of the roll and the belt comprises a grooved and/or blind bored surface, and the device

further comprises a unit for removing water from said grooved and/or blind bored surface, thereby increasing a dry content of a fibrous material web to be dewatered.

40. The device in accordance with claim 39, wherein the fibrous material web comprises a paper or a cardboard web.

41. The device in accordance with claim 39, wherein said water removal unit includes a blowing device for blowing out grooves and/or blind bores of said surface with a pressurized medium.

42. The device in accordance with claim 41, wherein said pressurized medium comprises pressurized air.

43. The device in accordance with claim 39, wherein said water removal unit includes a suction device for suctioning water out of said surface.

44. The device in accordance with claim 39, wherein said water removal unit includes a combined blowing and suction device.

45. The device in accordance with claim 39, wherein said water removal unit includes a device for applying a hydrodynamically produced underpressure to said surface.

46. The device in accordance with claim 45, wherein said device for applying hydrodynamically produced underpressure includes at least one of said at least two doctors.

47. The device in accordance with claim 46, wherein said at least one doctor comprises a foil doctor arranged diagonally.

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